MB QUART

# REFERENCE

MAXXSONICS USA, INC.
1290 Ensell Road
Lake Zurich, Illinois 60047 USA
E-Mail info@maxxsonics.com
Website www.maxxsonics.com

POWERED BY MAXXSONICS

## Installation Manual

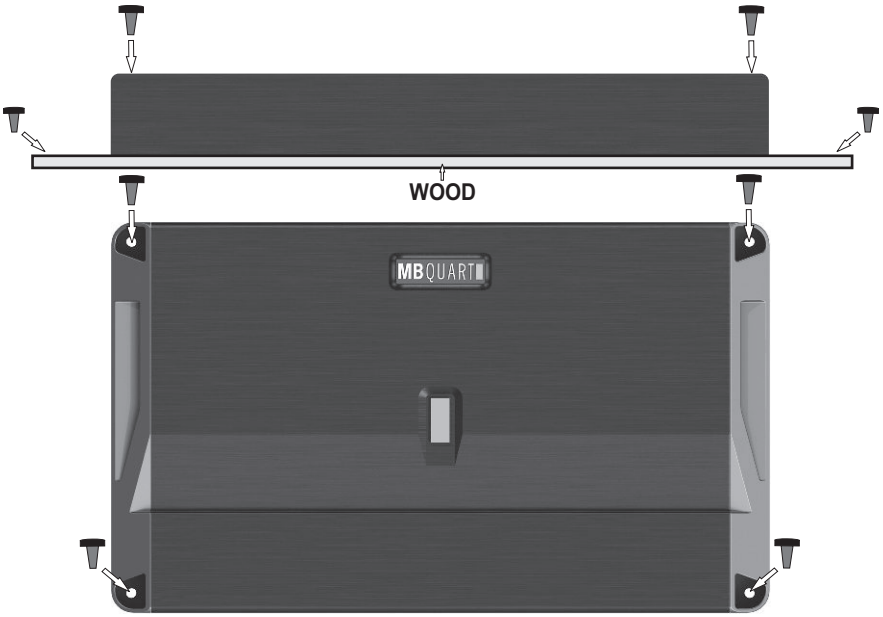
Congratulations!
By purchasing an amplifier from MB Quart, you have decided on a product of the highest technical quality. MB Quart wishes you great enjoyment with your amplifier. Should you have any questions about this system or other MB Quart products, please email us at info@maxxsonics.com

**System Design**
The success of any car stereo system relies on several factors, such as the system design, execution of the installation, and system setup. Please remember that any system is only as good as its weakest link.
Please remember that higher power systems are not necessarily useful purely for high sound pressure levels, but also to establish a headroom capability, to reproduce musical peaks cleanly without distortion.

Lower power amplifiers will clip earlier than their more powerful cousins, and cause loudspeaker failure when overdriven, due to the harmonics generated by a clipped signal, thus overheating voice coils.

Amplifiers should be mounted with the fins running horizontally for best convection cooling, to minimize overheating. Purchase the best quality RCA cables you can afford, for reliability and less engine noise interference in the audio system.

It is highly recommended that the amplifier be mounted to a board of MDF or other solid structure using the 4 mounting screws provided. Avoid mounting the amplifier to metal as this can introduce noise and other unwanted issues. When mounting the amplifier, ensure that it is mounted HORIZONTALLY, as shown in the diagram above, for optimal heat dissipation. Mounting amplifiers to speaker enclosures is not recommended as this can cause damage to the amplifier components. When choosing a location for mounting the amplifier, ensure that you check for clearance from wires, gas tank, electrical devices and brake lines etc.



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## WARRANTY

As the manufacturer of MB QUART car audio products, Maxxsonics USA Inc. warrants to the original consumer purchaser the amplifier to be free from defects in material and workmanship for one(1) year from the date of purchase.

This product meets the current EU minimum warranty requirements, if purchased in countries of the EU.

To ensure your warranty policy, keep your original receipt proving date of purchase.

All other parts and accessories sold with this product are warrantied to be free from defects in materials and workmanship for one(1) year from the date of purchase. Maxxsonics will repair or replace at it's option and free of charge during the warranty period, any system component that proves defective in materials and workmanship under normal installation, use and service provided that the product is returned to the authorized MB QUART dealer from where it was purchased.

A photo copy of the original receipt must accompany the product being returned. In the absence of the above, the warranty is one(1) year from the date of manufacture.

**There is no warranty for Unauthorized Internet Sales.**

Any damage to the product as a result of misuse, abuse, accident, incorrect wiring, improper installation, alteration of the date code or bar code labels, revolution, natural disaster, or any sneaky stuff because someone messed up, repair or alteration outside of our factory or Authorized Service Centers and anything else you have done that you should not have done is NOT covered.

This warranty is limited to defective parts and specifically excludes any incidental damages connected therewith. This warranty is not construed as an insurance policy.

Warranty on installation labor, removal, re-installation and freight charges are not the responsibility of Maxxsonics USA Inc.

**Please keep your purchasing slip for warranty reasons.**
**Bitte bewahren Sie Ihren Kaufbeleg für Garantiezwecke auf.**
**Veuillez conserver le reçu de caisse pour la garantie.**
**Por favor conserve su comprobante de compra a efectos de garantía.**
**Conservate la ricevuta di acquisto ai fini della garanzia.**
**Сохраните, пожалуйста чек для случаев, требующих предоставления гарантии.**

| | | |
|---|---|---|
| Warranty<br>Garantie<br>Garantie<br>Garantía<br>Garanzia<br>Срок Гарантии | 1 | years<br>Jahre<br>ans<br>años<br>anni<br>года |

**FOR EXTENDED WARRANTY INFORMATION, PLEASE VISIT WWW.MAXXWARRANTY.COM**

## General Instructions

**General:**
Run the wiring so that RCA cables are at least 18“ away from power and speaker cables. Keep RCA cables away from electrical devices in the vehicle that can cause electrical noise, such as electric fuel pumps, emission control modules and other on-board electronic modules.

**Power and ground connections:**(See table below)
Use a sufficient gauge power cable and ground cable using the chart below as reference to what size wire you require. REFERENCE series amplifiers require at least 4 gauge power wire. In a multi amplifier system, add the total value of the manufacture recommended fusing to get your total system amperage. Some applications may require multiple runs of power wire to meet the system requirements. In multi amplifier systems it is advisable to mount a large enough fuse right at the battery, and run one or multiple +12 volt power cables to a fused distribution block near the amplifiers. It is then a simple matter to connect the +12 volt terminal of each amplifier to the distribution block. During this process, please ensure that the main power fuse is removed to avoid shorting the electrical system. The main fuse must be within 12” of the vehicles battery.

Ground each amplifier with as short a ground lead as possible directly to the vehicle chassis using at least 4 gauge wire or equivalent to the size of the amplifiers’ power wire. Use a ground distribution block, if you wish, but it is extremely important to keep the main ground lead from this distribution block to the chassis as short as possible , not more than 12“. The ground connection integrity to the chassis is very important, and the best way to achieve a good, solid electrical and mechanical contact is to use a large round crimp lug, crimped and soldered to the ground cable. The next step is to scrape the paint off the vehicle chassis , slightly larger than the ground lug, at the connection point. Drill a clearance hole in the chassis, the same size as the lug hole, and use a bolt, spring washer and nut to securely fasten the ground lug. Use petroleum jelly to coat the bolt/lug connection, to prevent oxidization with time.

**TIP**: Use the same approach when installing head units, equalizers or any audio equipment for that matter - run short individual grounds from each piece directly to the vehicle chassis, to minimize ground loops and system noise. All power, ground and speaker connections should be crimped and soldered for reliability. Make sure that none of the cable insulation can chafe against exposed metal in the vehicle, causing short circuits to the chassis.

Safe connection sequence:
After all cables are run, connect speaker wires to the speakers and amplifiers, then run and plug in RCA cables. Next, connect all power, ground, and remote turn on leads. Now connect all +12 volt cables to the amplifier/s and distribution blocks and fuse holders. Finally, connect the main +12 volt cable to the battery, with the main fuse removed, and we are almost ready to power up the system.

**Power up the system:**
The following procedure may seem like overkill, but there is nothing more frustrating when turning on a system for the first time, and it does not work properly immediately.
First, make sure the head unit is off, and turn all level controls to minimum (counterclockwise), including the head unit volume control. Set all equalizers to 0 dB (no boost), and all crossover frequency controls at approximate frequencies, as recommended by the loudspeaker manufacturer. Set all input selector and crossover switches as required for the application. Remove all amplifier fuses, and insert the main fuse at the battery. If the fuse does not blow, you can insert the fuse in one of the amplifiers, and we are ready to turn on the system. Turn the head unit on, insert a CD, or select a radio station, and increase the head unit volume control. If the system sounds fine, turn off the head unit, and install fuses in the remaining amplifiers, one by one, till the complete system is powered up and functioning properly.

WIRE LENGTH

| SYSTEM AMPERAGE | 7-10 ft. | 10-13 ft. | 13-16 ft. | 16-19 ft. | 19-22 ft. | 22-28 ft. |
|---|---|---|---|---|---|---|
| 35-50 | 8 | 6 | 4 | 4 | 4 | 4 |
| 50-65 | 6 | 4 | 4 | 4 | 4 | 2 |
| 68-85 | 4 | 4 | 2 | 2 | 2 | 0 |
| 85-105 | 4 | 2 | 2 | 2 | 2 | 0 |
| 105-125 | 4 | 2 | 0 | 0 | 0 | 0 |
| 125-150 | 2 | 0 | 0 | 0 | 0 | 0 |

WIRE GAUGE

## Settings for Best Performance

**RA320.2 / RA400.2 / RA480.4 / RA640.4 / RA1000.4**

**General:**
At this point you are ready to get more specific on the settings for your amplifier.

**High Pass:**
-When in Hi Pass operation, this setting acts as a low frequency cut off for your system reproduction. The point that you set it at cuts off any frequencies from reproduction beyond this point. The 12 o'clock position is a great starting point. EXAMPLE: If you adjust the High Pass to 100Hz, the amplifier will not play frequencies below 100Hz but will play frequencies from 100Hz to the highest frequency the amplifier is capable of reproducing.
-When in Low Pass/Bandpass operation, this setting acts as a low frequency cut off for your system reproduction aka Subsonic Filter. The point that you set it at cuts off any frequencies from reproduction beyond this point. The 12 o'clock position is a great starting point. EXAMPLE: If you adjust the High Pass to 60Hz, the amplifier will not play frequencies below 60Hz but will play frequencies from 60Hz to the chosen Low Pass frequency.
-When in Flat/Full operation, the Low Pass crossover is bypassed.

**Bass EQ:**
This setting is a fixed bass boost at 45Hz that is variable from 0-12dB. This feature provides impact to your bass, but if not adjusted correctly, it can be over used and cause damage to your speakers and amplifiers. It is best to slowly turn this setting clockwise until the desired punch is felt. It is not recommended to exceed the 12 o'clock position unless listening at a low volume or a low recording quality as this can result in high distortion and possibly clipping.

**Low Pass:**
The Low Pass control acts as a ceiling and doesn't allow frequencies to the right of the desired setting to be reproduced. Turning the potentiometer all the way to the right is a great starting point. EXAMPLE: If you adjust the Low Pass to 120Hz, the amplifier will not play frequencies above 120Hz but will play frequencies from 120Hz to the chosen Hi Pass or Subsonic frequency.
-When in Hi Pass operation, this setting is bypassed.

**Level Control Setup:**
Ensure that the Level is turned completely to the left prior to turning the system on. Next you should insert a CD or cassette that you are familiar with to use as a reference, and turn the head unit volume control to about 80% of its full setting. The system sound level will of course be very low, and the following procedures will help you to match the amplifier input sensitivities properly to the head unit output signal level.
It is important to match the amplifier **LEVEL** input sensitivity to the Radio/CD output sensitivity. This can be located in the Radio/CD manual.
If the Radio/CD output sensitivity is 2 volts, then adjust the amplifier **LEVEL** input to 2 volts.

If you are not sure what the Radio output sensitivity is, follow these general guide lines:
Turn the level control up slowly, till you hear distortion, then back off a few degrees on the control. If at any point your amplifier goes into protection, you will need to turn the Level to the left a bit and then try again. If you reach a point where the output does not increase, stop turning the Level control to the right as the amplifier/speaker combo has reached its maxx output in this application.

**RA1000.1 / RA1500.1 / RA2000.1**

**General:**
At this point you are ready to get more specific on the settings for your amplifier.

**Subsonic:**
This setting acts as a low frequency cut off for your system bass reproduction. The point that you set it at cuts off any frequencies from reproduction beyond this point. The 12 o'clock position is a great starting point. EXAMPLE: If you adjust the Subsonic to 25Hz, the amplifier will not play frequencies below 25Hz but will play frequencies from 25Hz to the chosen Low Pass frequency.

**Bass EQ:**
This setting is a fixed bass boost at 45Hz that is variable from 0-10dB. This feature provides impact to your bass, but if not adjusted correctly, it can be over used and cause damage to your subwoofers and amplifiers. It is best to slowly turn this setting clockwise until the desired punch is felt. It is not recommended to exceed the 12 o'clock position unless listening at a low volume or a low recording quality as this can result in high distortion and possibly clipping.

**Low Pass:**
The Low Pass control acts as a ceiling and doesn't allow frequencies to the right of the desired setting to be reproduced. The 12 o'clock position is a great starting point. EXAMPLE: If you adjust the Low Pass to 80Hz, the amplifier will not play frequencies above 80Hz but will play frequencies from 80Hz to the chosen Subsonic frequency.

**Level Control Setup:**
Ensure that the Level is turned completely to the left prior to turning the system on. Next you should insert a CD or cassette that you are familiar with to use as a reference, and turn the head unit volume control to about 80% of its full setting. The system sound level will of course be very low, and the following procedures will help you to match the amplifier input sensitivities properly to the head unit output signal level.
It is important to match the amplifier **LEVEL** input sensitivity to the Radio/CD output sensitivity. This can be located in the Radio/CD manual.
If the Radio/CD output sensitivity is 2 volts, then adjust the amplifier **LEVEL** input to 2 volts.

If you are not sure what the Radio output sensitivity is, follow these general guide lines:
Turn the level control up slowly, till you hear distortion, then back off a few degrees on the control. If at any point your amplifier goes into protection, you will need to turn the Level to the left a bit and then try again. If you reach a point where the output does not increase, stop turning the Level control to the right as the amplifier/subwoofer combo has reached its maxx output in this application.

# TROUBLE SHOOTING

**The key to finding the problem in a misbehaving sound system is to isolate parts of that system in a logical fashion to track down the fault.**

**Description of the Diagnostic system built into all MB Quart amplifiers**
The diagnostic system will shut down the amplifier, until reset by turning the head unit off, and back on. This state of affairs will be indicated by the front panel PROTECT LED lighting up under the following conditions:
1 - A short circuit on the loudspeaker leads.
2 - An internal amplifier fault that causes a DC offset on the loudspeaker output.

Should the amplifier go into diagnostic mode, simply disconnect all RCA and speaker leads, while keeping +12 volt, power ground and remote leads connected.
1. Now turn the amplifier back on, and if the diagnostic LED lights, the amplifier has an internal fault.
2. If not, plug the RCA cables back, and reset the amplifier. If it goes into diagnostic now, the fault lies in the input, either with bad cables or source unit.
3. If the amplifier seems fine with RCA cables plugged in, connect the speakers, one at a time, and if one of the speakers or its wiring is faulty, it will activate the diagnostic system.

**Amplifier heatsink overheating**
The amplifiers will shut down when the heatsink temperature reaches 80 degrees centigrade, and turn back on once the unit has cooled down below that point.
*Causes of overheating:*
1 - Inadequate cooling - relocate or remount to provide better natural airflow over the fins.
2 - Driving high power levels into low impedances - back off on the volume control, and/or make sure you are not loading the amplifier with less than the recommended loudspeaker impedance.

**Low output power**
1 - Check that level controls have been set up properly.
2 - Make sure that the battery voltage, as measured at the amplifier's +12 volt and ground terminals, is 11 volts or more.
3 - Check all +12 volt and ground connections.

**Fuses blowing**
1 - The use of loudspeaker impedances below the recommended minimums will draw more current - check.
2 - A short on the main +12 volt cable from the battery to the vehicle chassis will cause the main fuse to blow.

**System does not turn on**
1 - Check all fuses.
2 - Check all connections.
3 - Measure the +12 volt and remote turn on voltages at the amplifier terminals. If these are non existent or low, take voltage measurements at fuse holders, distribution blocks, the head unit's +12 volt and remote leads to localize the problem.

**Noise problems**
System noise can be divided into two categories, hiss, and electrical interference.

**Hiss, or white noise**
1 - High levels of white noise usually occurs when amplifier level controls are turned up too high - readjust according to the procedures in section *"Setting up systems after installation for best performance"*
2 - Another major problem that can cause excessive hiss, is a noisy head unit - unplug the amplifier input RCA cables, and if the hiss level reduces, the source unit is at fault.

**Electrical interference**
The inside of an automobile is a very hostile electrical environment. The multitude of electrical systems, such as the ignition system, alternator, fuel pumps, air conditioners, to mention just a few, create radiated electrical fields, as well as noise on the +12 volt supply and ground. Remember to isolate the problem - first unplug amplifier input RCA cables, if the noise is still present, check the speaker leads, if not, plug the RCA's back, and investigate the source driving the amplifier, one component at a time.

***A ticking or whine that changes with engine RPM:***
1 - This problem could be caused by radiation pickup of RCA cables too near to a fuel pump or a distributor, for instance, - relocate cables.
2 - Check that the head unit ground is connected straight to the vehicle chassis, and does not use factory wiring for ground.
3 - Try to supply the head unit with a clean +12 volt supply directly from the battery +, instead of using a supply from the in dash wiring/fusebox.

***A constant whine:***
This type of noise can be more difficult to pinpoint, but is usually caused by some kind of instability, causing oscillations in the system.
1 - Check all connections, especially for good grounds.
2 - Make sure that no speaker leads are shorting to exposed metal on the vehicle chassis.
3 -RCA cables are notorious for their problematic nature, so check that these are good, in particular the shield connections.

# 2-Channel Amplifiers

**2 Channel Full Range Stereo:**

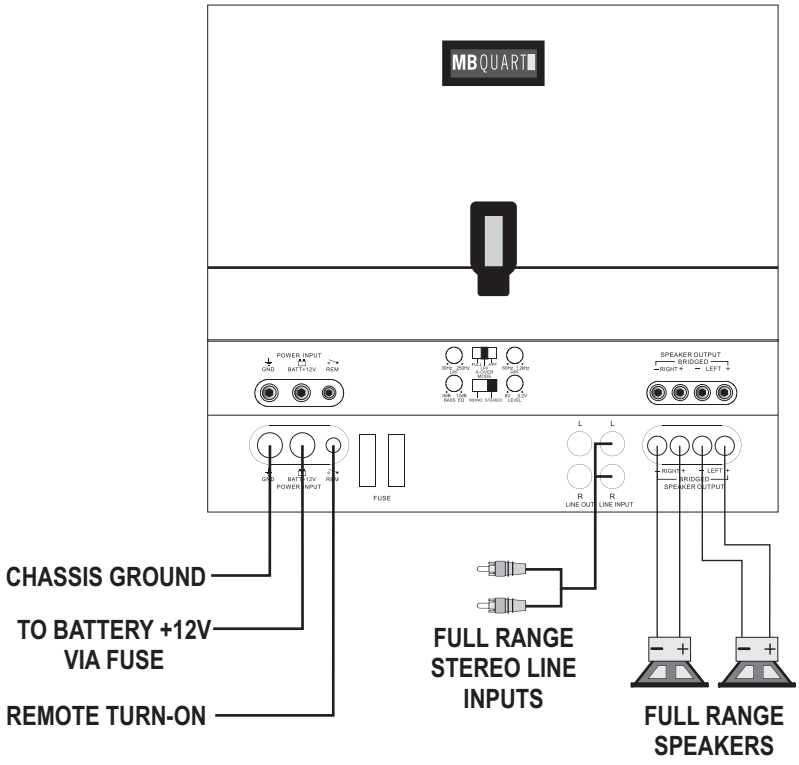
Interconnect cable checklist:
- Connect the inputs of the amplifier to a Radio/CD with quality RCA cables.

Switch setting checklist:
- 1/2CH X-OVER: FULL

MODE: "STEREO" since channels are being run independently.

Control checklist:
- Refer to the section "Settings for Best Performance"

Minimum final loudspeaker impedances:
- 2 ohm per channel.




**MONO:**

Here we show how to use the 2 channel amplifiers as a 1 channel unit by taking advantage of the mono bridging capability of all MB Quart amplifiers.

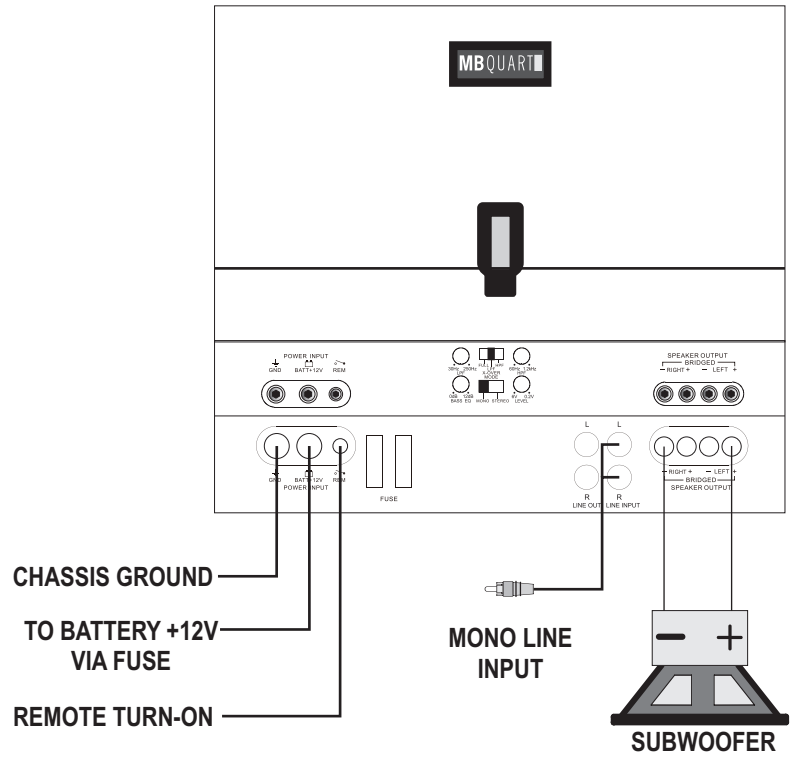
**Interconnect cable checklist:**
- Connect the inputs of channel pair 1/2 to a suitable signal source, e.g. a head unit with good quality RCA cables.
- A MONO signal source is suggested, such as would be available from the mono sub bass output of an active crossover, whether standalone, or built into a head unit or equalizer.

**Important:** Do not be tempted to connect the hot, or positive outputs, from any source together to obtain a mono signal, as this could very well damage the output stage of that source.
- It is suggested to feed the SAME signal to both left and right inputs via a Y-adapter RCA cable.
- Connect the mono speaker positive terminal to the LEFT +, and its negative terminal to RIGHT - as shown.

**Switch setting checklist:**
**- 1/2CH X-OVER:** LPF
MODE: MONO

**Control checklist:**
- Refer to the section *"Settings for Best Performance"*

**Minimum final loudspeaker impedances:**
**- 4-Ohms mono bridged**



# 4-Channel Amplifiers

**4 Channel Full Range Stereo:**

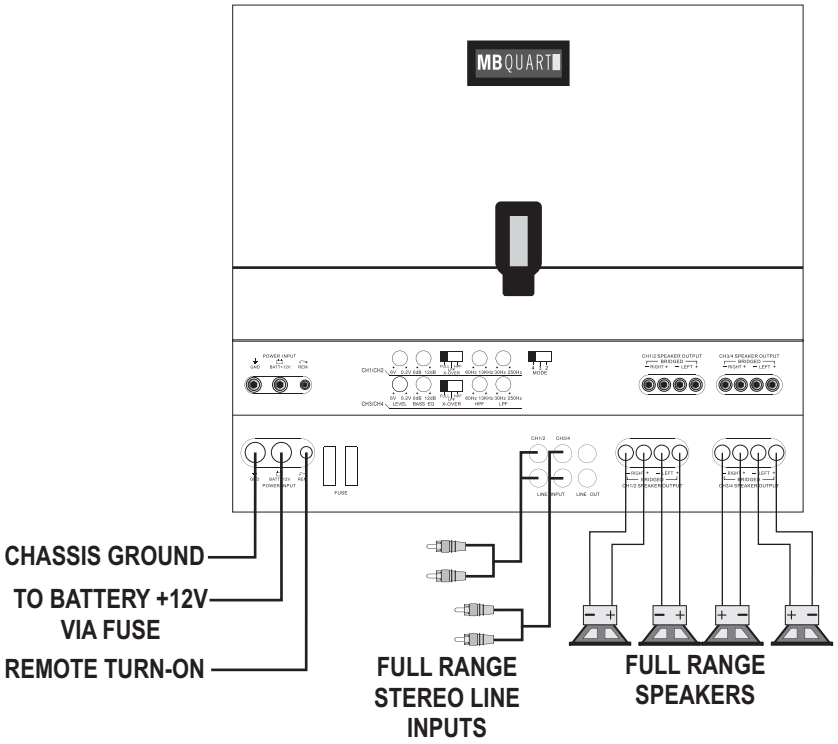
Interconnect cable checklist:
- Connect the four inputs of the amplifier to a Radio/CD with quality RCA cables.

Switch setting checklist:
- 1/2CH X-OVER: FULL
- 3/4CH X-OVER: FULL

MODE: "4" since 2 sets of RCA's are connected.
(If only 1 set of RCA's are available, feed them to Inputs 1&2 and switch MODE to 2. This will internally route signal to channels 3&4.)

Control checklist:
- Refer to the section "Settings for Best Performance"

Minimum final loudspeaker impedances:
- 2-Ohms per channel.



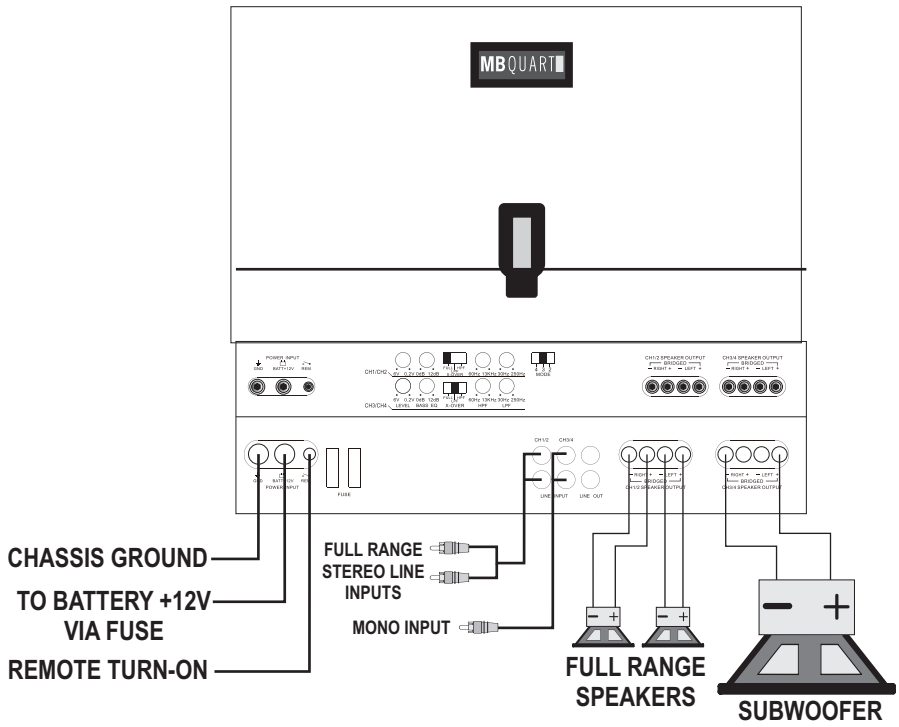

**2 or 3 Channel System:**

Here we show how to use the 4 channel amplifiers as a 3 channel unit by taking advantage of the mono bridging capability of all MB Quart amplifiers. In order to create a 2 channel system, simply follow the example to also mono bridge channel pair 1&2.

**Interconnect cable checklist:**
- Connect the inputs of channel pair 1&2 to a suitable stereo source, e.g. a head unit with good quality RCA cables.
- A MONO signal source is suggested to bridge channel pair 3&4, such as would be available from the mono sub bass output of an active crossover, whether standalone, or built into a head unit or equalizer. If you only have 1 set of RCA outputs from your headunit, you can simply connect those to the inputs for ch 1&2 and switch the **MODE** to 2.

**Important:** Do not be tempted to connect the hot, or positive outputs, from any source together to obtain a mono signal, as this could very well damage the output stage of that source.
- Connect the mono speaker positive terminal to the CH3&4 Left +, and its negative terminal to CH3&4 Right - as shown.

**Switch setting checklist:**
**- 1/2CH X-OVER:** FULL
**- 3/4CH X-OVER:** LPF
**Control checklist:**
- Refer to the section *"Settings for Best Performance"*
**Minimum final loudspeaker impedances:**
**- 2 ohm per channel in stereo mode.**
**- 4 ohm mono bridged.**



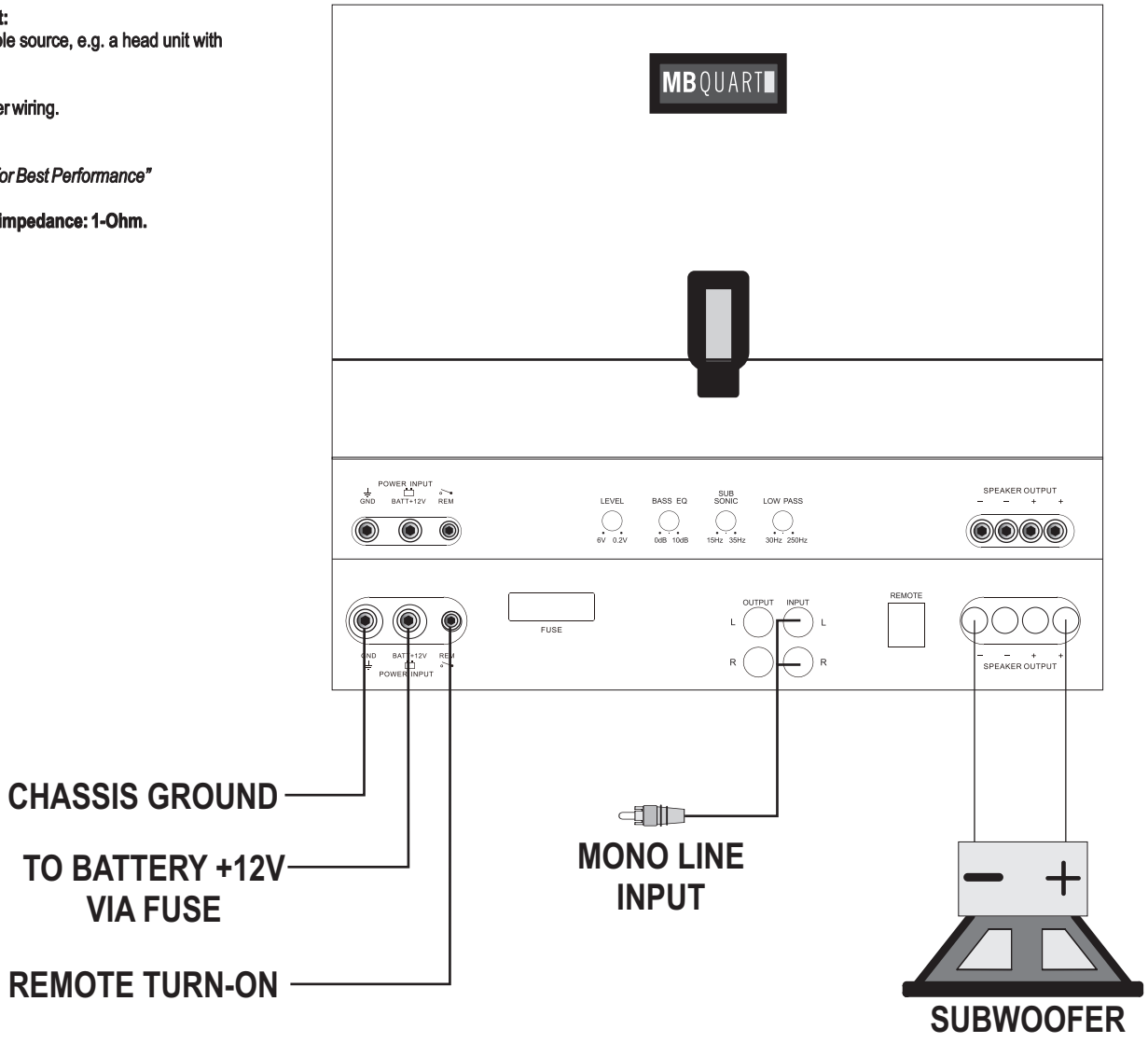
## Mono Amplifiers

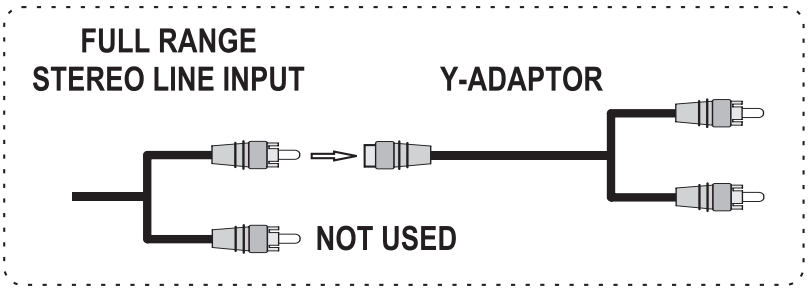
**Interconnect cable checklist:**
Connect the inputs to a suitable source, e.g. a head unit with good quality RCA cables.

Use at least #12 gauge speaker wiring.

**Control checklist:**
Refer to the section *"Settings for Best Performance"*

**Minimum final loudspeaker impedance: 1-Ohm.**




*Note: You can use the Radio/CD designated mono line output or a full range stereo line output. For full range stereo line output, you will need an optional "Y-Adaptor" as shown

| FEATURES | 2-CHANNEL | | 4-CHANNEL | | | 1-CHANNEL | | |
|---|---|---|---|---|---|---|---|---|
| | RA320.2 | RA320.2 | RA480.4 | RA640.4 | RA1000.4 | RA1000.1 | RA1500.1 | RA2000.1 |
| Output Power Rating (rms) | | | | | | | | |
| 4-Ohms | 80 X 2 | 100 X 2 | 60 X 4 | 80 X 4 | 125 X 4 | 475 X 1 | 500 X 1 | 650 X 1 |
| 2-Ohms | 160 X 2 | 200 X 2 | 120 X 4 | 160 X4 | 250 X4 | 750 X 1 | 1000 X1 | 1300 X 1 |
| 1-Ohm | N/A | N/A | N/A | N/A | N/A | 1000 X 1 | 1500 X 1 | 2000 X 1 |
| Mono Bridge at 4-Ohms | 320 X 1 | 400 X 1 | 240 X 2 | 320 X2 | 500 X 3 | N/A | N/A | N/A |
| Power Supply | PWM | PWM | PWM | PWM | PWM | PWM | PWM | PWM |
| Output Power Circuit Configuration | Mosfet | Mosfet | Mosfet | Mosfet | Mosfet | Mosfet | Mosfet | Mosfet |
| Miscellaneous Specifications | | | | | | | | |
| Soft Start Sound | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Frequency Response-3dB | 30Hz - 45kHz | 30Hz - 45kHz | 30Hz - 45kHz | 30Hz - 45kHz | 30Hz - 45kHz | 15Hz - 250Hz | 15Hz - 250Hz | 15Hz - 250Hz |
| Damping Factor | >180 | >180 | >180 | >180 | >180 | >200 | >200 | >200 |
| S/N Ratio(A-Weight) | >92dB | >92dB | >92dB | >92dB | >92dB | >95dB | >95dB | >95dB |
| THD & Noise | 0.05% | 0.05% | 0.05% | 0.05% | 0.05% | 0.10% | 0.10% | 0.10% |
| Channel Separation | >80dB | >80dB | >80dB | >80dB | >80dB | | | |
| Variable Input Level Control | 0.2V-6.0V | 0.2V-6.0V | 0.2V-6.0V | 0.2V-6.0V | 0.2V-6.0V | 0.2V-6.0V | 0.2V-6.0V | 0.2V-6.0V |
| Input Impedance | 47kΩ | 47kΩ | 47kΩ | 47kΩ | 47kΩ | 47kΩ | 47kΩ | 47kΩ |
| Diagnostic Indicator(power: green / protect: red) | Power/Protect | Power/Protect | Power/Protect | Power/Protect | Power/Protect | Power/Protect | Power/Protect | Power/Protect |
| Protection(DC, Short, Thermal, Overload) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Crossover Operation | | | | | | | | |
| *Crossover Switch for 1+2 channels* | FULL / HPF / LPF | FULL / HPF / LPF | FULL / HPF / LPF | FULL / HPF / LPF | FULL / HPF / LPF | N/A | N/A | N/A |
| Variable HPF (High Pass Filter) | 60Hz - 1.2KHz | 60Hz - 1.2KHz | 60Hz - 13KHz | 60Hz - 13KHz | 60Hz - 13KHz | N/A | N/A | N/A |
| Variable LPF (Low Pass Filter) | 30Hz - 250Hz | 30Hz - 250Hz | 30Hz - 250Hz | 30Hz - 250Hz | 30Hz - 250Hz | 30Hz - 250Hz | 30Hz - 250Hz | 30Hz - 250Hz |
| Variable Subsonic Filter | N/A | N/A | N/A | N/A | N/A | 15Hz - 35Hz | 15Hz - 35Hz | 15Hz - 35Hz |
| Bass EQ (Bass Boost at 45Hz) | 0dB - 12dB | 0dB - 12dB | 0dB - 12dB | 0dB - 12dB | 0dB - 12dB | 0dB - 10dB | 0dB - 10dB | 0dB - 10dB |
| *Crossover Switch for 3+4 channel* | N/A | N/A | FULL / HPF / LPF | FULL / HPF / LPF | FULL / HPF / LPF | N/A | N/A | N/A |
| Variable HPF (High Pass Filter) | N/A | N/A | 60Hz - 13KHz | 60Hz - 13KHz | 60Hz - 13KHz | N/A | N/A | N/A |
| Variable LPF (Low Pass Filter) | N/A | N/A | 30Hz - 250Hz | 30Hz - 250Hz | 30Hz - 250Hz | N/A | N/A | N/A |
| Bass EQ (Bass Boost at 45Hz) | N/A | N/A | 0dB - 12dB | 0dB - 12dB | 0dB - 12dB | N/A | N/A | N/A |
| *Crossovers for channel 5* | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Variable HPF (High Pass Filter) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Variable LPF (Low Pass Filter) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bass EQ (Bass Boost at 45Hz) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| *Line Output* | Full Range | Full Range | Full Range | Full Range | Full Range | Full Range | Full Range | Full Range |
| *Unbalanced Input(RCA Jack)* | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| *Phone Jack for Remote Control* | No | No | No | No | No | Yes | Yes | Yes |
| *Remote Level Control Module* | No | No | No | No | No | Yes | Yes | Yes |
| Others | | | | | | | | |
| Power Terminal | 4-GA | 4-GA | 4-GA | 4-GA | 4-GA | 4-GA | 4-GA | 2-GA |
| Speaker Terminal | 16-GA | 16-GA | 16-GA | 16-GA | 16-GA | 14-GA | 14GA | 12-GA |
| Fuse Size | 15 AMPS X 2 | 20 AMPS X 2 | 25 AMPS X 2 | 30 AMPS X 3 | 60 AMPS X 2 | 80 AMPS X 1 | 60 AMPS X 2 | EXTERNAL 200 AMP |
| Dimensions Length x Width x Height (inches) | 10 X 8.27 X 2.4 | 11.18 X 8.27 X 2.4 | 13.94 X 8.27 X 2.4 | 15.51 X 8.27 X 2.4 | 17.09 X 8.27 X 2.4 | 15.51 X 8.27 X 2.4 | 17.09 X 8.27 X 2.4 | 21.81 X 8.27 X 2.4 |

Tested Tough! That's the foundation for every product. Hours of design and testing go into each part to ensure that they not only meet but far exceed industry standards for performance and durability.

MAXXLINK accessories are developed by the mobile audio professionals at Maxxsonics. Since 2001 Maxxsonics has developed some of the most powerful and best sounding mobile audio equipment you can choose. Hifonics, MB Quart, Crunch and Autotek are brands that are known throughout the world and have decades of experience dealing with the harshest environments on the road.

MAXXLINK is built around a simple labeling system. These labels will help you choose which package will fit your application. The simplest codes to look for are V3, V2 and V1 with their matching performance level icons. 10, 7, 5. It is easy to choose based on the total power of the system.

# MAXXTECH

| THE SYSTEM | MAXXLINK PRODUCTS & WARRANTY |
|---|---|
| **Biggest POWER systems** | **V3 Products, Level 10 Performance + 1 Year Warranty** |
| **Moderate POWER systems** | **V2 Products, Level 7 Performance + 6 Month Warranty** |
| **Smaller POWER systems** | **V1 Products, Level 5 Performance** |

Maxxsonics is so confident in the reliability of the MAXXLINK accessories, that when any of the Hifonics, MB Quart, Crunch or Autotek amplifiers are matched with a V3 level amplifier kit the customer can extend the amplifier warranty for ONE FULL YEAR. When the customer chooses V2, they can extend the warranty for a full six months. The process is simple, the customer simply registers their amplifier on MAXXWarranty.com/MAXXLINK.

FACEBOOK INSTAGRAM WEBSITE

MB QUART
German Engineering

# Check out our videos of new products, events and technical tutorials at www.youtube.com/maxxsonicsusainc

MAXXSONICS USA, INC.
1290 Ensell Road
Lake Zurich, Illinois 60047 USA
E-Mail info@maxxsonics.com
Website www.maxxsonics.com

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RA320.2 / RA400.2 / RA480.4 / RA640.4 / RA1000.4 / RA1000.1 / RA1500.1 / RA2000.1